yumeng ma

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Education

Brown University *Providence, RI*
Sc.M in Computer Science *2022 - Present*

Arizona State University *Tempe, AZ*
B.S. in Computer Science and Psychology *2019 - 2022*

> Barrett Honors College
> Summa Cum Laude
> Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Publications

Conferences

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. "Together but not together": Evaluating Typing Indicators for Interaction-Rich Communication. CHI 2023. ACM.

Ian Gonsher, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. IHIET 2023.

Ian Gonsher, Asad Khan, Ray Sun, **Yumeng Ma**, et al. Integrating Interfaces into Furniture: New Paradigms for Ubiquitous Computing, Mixed Reality, and Telepresence within the Built Environment. MAB 2023. ACM.(to appear)

Research Experience

University of California Los Angeles (HCI Lab) *Los Angeles CA*
Research Intern *2023 - Present*
- Leveraging deep learning techniques to ground large language models into proactive computer vision guidance.

Brown University (Mixed Reality Window Project) *Providence, RI*
Design Researcher *2022 - Present*
- Introducing a new paradigm for the integration of AR into laptop and desktop displays, enabling local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

Brown University (Robotic Arm Manipulation) *Providence, RI*
Student Researcher *2023*
- Performed and tested text-driven robot grasp tasks with CLIP-feature field in NeRF.

Brown University (HCI Lab) *Providence, RI*
Distributed Research Experiences for Undergraduates *2022*
- Designed novel typing indicators and found that they enhance user co-presence in written communication.

Arizona State University Department of Psychology (SoLET Lab) *Tempe, AZ*
Research Assistant *2022*
- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

NASA Psyche Mission *Tempe, AZ*
Collaborator *2021-2022*
- Developed a web app that enabled users to interact with the Psyche Spacecraft model and conducted user studies with biometric data analysis, revealing that the app increased public engagement.

Awards, Fellowships, & Grants

2023	**Tapia Celebration of Diversity in Computing Conference Scholarship**, Brown University
2019 - 2023	**Microsoft DisAbility Scholarship**, Microsoft
2022	**Google CS Research Mentorship Program (CSRMP) Fellowship**, Google
2022	**Virtual Grace Hopper Celebration (GHC) Scholarship**, AccessComputig

Teaching Experience

Spring '22	**Information Assurance**, TA for Adam Doupe and Tiffany Bao, Arizona State University

Extracurricular & Work Activity

AccessComputing

Member *2021 - present*

- Supporting an environment for diversity and inclusivity in computing fields.

Brown University Computer Science Diversity Committee *Providence, RI*

Master's Representative *2022 - 2023*

- Participated in the drafting of the Pathways to Diversity and Inclusion Action Plan II for Brown University's Department of Computer Science.

Microsoft Contract *Tempe, AZ*

Microsoft Support / Xbox Advocate *2020 - 2021*

- Assisted business clients with various Microsoft products and provided personalized support for Xbox customers across all gaming endpoints.

Skills

Programming	Python, C/C++, C#, Java, Unix/Linux, ROS
Web	HTML, CSS, Javascript, Typescript, React, Vue, APIs, Git
Game Dev	Unity, Godot
Data	Jupyter Notebook, MySQL, MATLAB
Design	UI/UX, Adobe Creative Suite, Figma, Wireframing, Fusion360, Blender
Hardware	Arduino, Rasberry Pi